NOV 29 2005

This report is required by law (? USC 21 43) Failure to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150

Set reverse side for additionalinformation

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

ANNUAL REPORT OF RESEARCH FACILITY
(TYPE OR PRINT)

1. REGISTRATION NO. 31-R-0021
CUSTOMER NUMBER: 228

FORM APPROVED
OMB NO. 0579-0036

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA Include Zip Code)

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Telephone: (614) 424-7444

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS (Sites)

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A)

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used	E. Number of animals upon which teaching experiments, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. *(An explanation of the procedures producing pain or distress in those animals and the reasons such drugs were not used must be attached to this report)*	F. TOTAL NO OF ANIMALS (Cols. C + D + E)
4. Dogs		676	69	5	750
5. Cats		29			29
6. Guinea Pigs		693	258	707	1,658
7. Hamsters					
8. Rabbits	146	650	203	466	1,319
9. Non-human Primates		239	68	64	371
10. Sheep					
11., Pigs					
12. Other Farm Animals					
Goat		28			28
13 Other Animals					

ASSURANCE STATEMENTS

1) Professionally acceptable standards governing the care, treatment, and use of animals including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility

2) Each principal investigator has considered alternatives to painful procedures.

3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

4) The attending veterinarianfor this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL

(Chief Executive Officer or Legally Responsible Institutional Official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

SIGNATURE OF CEO OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
(b)(6), (b)(7)(c)		11-23-05

APHIS FORM 7023
(AUG 91)

(Replaces VS FORM 18-23 (OCT 88) which is obsolete

Summary of Exceptions to the Regulations or Standards

A. Primary Enclosures

1. Three animals were socially housed instead of pairing to provide social housing for an odd numbered group.

2. This social housing was done to promote species-typical behavior and enhance acclimation.

3. Species: Primate

4. Number of animals: 6

B. Dog Exercise

1. Exceptions were granted to the dog exercise plan.

2. These exceptions were granted for scientific reasons.

   a. Radioactive Study

      Due to the radioactive nature of the doses administered there was concern for radioactive contamination of the room and equipment and between dose groups which would compromise the study design. The exemption was of short duration (2 ½ weeks).

3. Species: Dog

4. Number of animals used: 25

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 482

3. Species (common name) of animals used in this study: Guinea Pig

4. Explain the procedure producing pain and/or distress: Intradermal injection. The dosing procedure involved an injection with bacterial spores which did not cause more than momentary pain or distress. The resultant bacterial infection may have caused pain and/or distress.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics and sedatives may potentiate the effects of infection and could confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which were moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   Agency: FDA

   CFR: As appropriate, study conducted under Title 21, Food and Drugs, specifically, 21CFR.314.610, approval based on evidence of effectiveness from studies in animals (under subpart I--approval of new drugs when human efficacy studies are not ethical or feasible), and 21CFR601.91, approval based on evidence of effectiveness from studies in animals (under subpart H--approval of biological products when human efficacy studies are not ethical or feasible).

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 143

3. Species (common name) of animals used in this study: Guinea Pig

4. Explain the procedure producing pain and/or distress: Subcutaneous injection. The dosing procedure involved an injection with bacterial spores which did not cause more than momentary pain or distress. The resultant bacterial infection may have caused pain and/or distress.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics and sedatives may potentiate the effects of infection and could confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which were moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   This work was conducted to validate a model and develop data necessary for definitive studies [required by the federal government under 21CFR.314.610 - subpart I -approval of new drugs when human efficacy studies are not ethical or feasible, and/or 21CFR601.91 - subpart H -approval of biological products when human efficacy studies are not ethical or feasible].

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 27

3. Species (common name) of animals used in this study: Guinea Pig

4. Explain the procedure producing pain and/or distress: Intramuscular challenge of toxins. The dosing procedure involved an injection of a bacterial toxin solution which did not cause more than momentary pain or distress. The resultant toxicity may have caused pain and/or distress. This work was conducted to evaluate the protective ability of passively transferred sera.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics and sedatives may potentate the effects of infection and could confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which were moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   CFR: As appropriate, study conducted under Title 21, Food and Drugs, specifically, 21CFR.314.610, approval based on evidence of effectiveness from studies in animals (under subpart I--approval of new drugs when human efficacy studies are not ethical or feasible), and 21CFR601.91, approval based on evidence of effectiveness from studies in animals (under subpart H--approval of biological products when human efficacy studies are not ethical or feasible).

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 55

3. Species (common name) of animals used in this study: Guinea Pig

4. Explain the procedure producing pain and/or distress:
   To estimate physiological effects in human beings, guinea pigs were exposed to aerosols, or contaminated surfaces, or injected subcutaneously to determine physiological effects of unidentified compounds.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

To estimate the physiological effects in man, guinea pigs were exposed to unidentified compounds. It is necessary to use a species of animal known to respond to compounds in a manner similar to that of man. There are no known characterized, surrogate markers to predict mortality. Animals exhibiting mild clinical signs often recovered without signs of pain and those with severe signs died rapidly. Anesthetics, analgesics and tranquilizers would have interfered with the physiological effects of these compounds. Experienced staff veterinarians were on site to monitor the study conduct and any animal welfare issues. These data are critical to human safety in the event of exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   N/A

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 152

3. Species (common name) of animals used in this study: New Zealand White Rabbits

4. Explain the procedure producing pain and/or distress: Aerosol challenge with bacterial spores. The challenge was performed using a muzzle-only exposure chamber. The challenge procedure itself is not painful but resultant bacterial infection may have caused pain and/or distress. This work was conducted to evaluate the effectiveness of monoclonal antibodies, antibiotic treatment and/or vaccination (proprietary).

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics, and sedatives could not be provided because it had the potential to mask or potentiate the effects of infection and confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians and animal technicians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which are found to be moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   Agency: FDA

   CFR: As appropriate, study conducted under Title 21, Food and Drugs, specifically, 21CFR.314.610, approval based on evidence of effectiveness from studies in animals (under subpart I--approval of new drugs when human efficacy studies are not ethical or feasible), and 21CFR601.91, approval based on evidence of effectiveness from studies in animals (under subpart H--approval of biological products when human efficacy studies are not ethical or feasible).

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 21

3. Species (common name) of animals used in this study: New Zealand White Rabbits

4. Explain the procedure producing pain and/or distress: Aerosol challenge with bacterial spores. The challenge was performed using a muzzle-only exposure chamber. The challenge procedure itself is not painful but resultant bacterial infection may have caused pain and/or distress. Certain of these studies evaluated the effectiveness of proprietary vaccines.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics, and sedatives could not be provided because it had the potential to mask or potentiate the effects of infection and confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians and animal technicians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which are found to be moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   This work was conducted to validate a model and develop data necessary for definitive studies [required by the federal government under 21CFR.314.610 - subpart I -approval of new drugs when human efficacy studies are not ethical or feasible, and/or 21CFR601.91 - subpart H -approval of biological products when human efficacy studies are not ethical or feasible].

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 127

3. Species (common name) of animals used in this study: New Zealand White Rabbits

4. Explain the procedure producing pain and/or distress: Intramuscular injection. The dosing procedure involved an injection with bacterial spores which did not cause more than momentary pain or distress. The resultant bacterial infection may have caused pain and/or distress.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics and sedatives may potentiate the effects of infection and could confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which were moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   This work was conducted to validate a model and develop data necessary for definitive studies [required by the federal government under 21CFR.314.610 - subpart I -approval of new drugs when

human efficacy studies are not ethical or feasible, and/or 21CFR601.91 - subpart H -approval of biological products when human efficacy studies are not ethical or feasible].

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 166

3. Species (common name) of animals used in this study: New Zealand White Rabbits

4. Explain the procedure producing pain and/or distress: Subcutaneous injection. The dosing procedure involved an injection with bacterial spores which did not cause more than momentary pain or distress. The resultant bacterial infection may have caused pain and/or distress. This classified work was conducted to evaluate the effectiveness of vaccination (proprietary).

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics and sedatives may potentiate the effects of infection and could confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which were moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   This work was conducted to validate a model and develop data necessary for definitive studies [required by the federal government under 21CFR.314.610 - subpart I -approval of new drugs when human efficacy studies are not ethical or feasible, and/or 21CFR601.91 - subpart H -approval of biological products when human efficacy studies are not ethical or feasible].

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 36

3. Species (common name) of animals used in this study: Rhesus macaques

4. Explain the procedure producing pain and/or distress: Aerosol challenge with bacterial spores. The challenge was performed under Telazol® anesthesia using a head-only exposure chamber. The challenge procedure itself is not painful but resultant bacterial infection may have caused pain and/or distress. This work was conducted to evaluate the effectiveness of antibiotic therapy and vaccination (proprietary).

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics, and sedatives could not be provided because it had the potential to mask or potentiate the effects of infection and confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians and animal technicians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the

basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which are found to be moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   Agency: FDA

   CFR: As appropriate, study conducted under Title 21, Food and Drugs, specifically, 21CFR.314.610, approval based on evidence of effectiveness from studies in animals (under subpart I--approval of new drugs when human efficacy studies are not ethical or feasible), and 21CFR601.91, approval based on evidence of effectiveness from studies in animals (under subpart H--approval of biological products when human efficacy studies are not ethical or feasible).

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 5

3. Species (common name) of animals used in this study: Rhesus macaques

4. Explain the procedure producing pain and/or distress: Aerosol challenge with bacterial spores. The challenge was performed under Telazol® anesthesia using a head-only exposure chamber. The challenge procedure itself is not painful but resultant bacterial infection may have caused pain and/or distress.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics, and sedatives could not be provided because it had the potential to mask or potentiate the effects of infection and confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians and animal technicians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which are found to be moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   This work was conducted to validate a model and develop data necessary for definitive studies [required by the federal government under 21CFR.314.610 - subpart I -approval of new drugs when human efficacy studies are not ethical or feasible, and/or 21CFR601.91 - subpart H -approval of biological products when human efficacy studies are not ethical or feasible].

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 12

3. Species (common name) of animals used in this study: Cynomolgus macaques

4. Explain the procedure producing pain and/or distress: Aerosol challenge with bacterial spores. The challenge was performed under Telazol® anesthesia using a head-only exposure chamber. The challenge procedure itself is not painful but resultant bacterial infection may have caused pain and/or distress. This work was conducted to evaluate the effectiveness of vaccination (proprietary).

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics, and sedatives could not be provided because it had the potential to mask or potentiate the effects of infection and confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians and animal technicians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that death is rapid following the onset of symptoms, and that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which are found to be moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   This work was conducted to validate a model and develop data necessary for definitive studies [required by the federal government under 21CFR.314.610 - subpart I -approval of new drugs when human efficacy studies are not ethical or feasible, and/or 21CFR601.91 - subpart H -approval of biological products when human efficacy studies are not ethical or feasible].

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 8

3. Species (common name) of animals used in this study: Cynomolgus macaques

4. Explain the procedure producing pain and/or distress: Intravenous challenge with a systemic virus to test the protective efficacy of a vaccine candidate. The challenge was performed under Telazol® anesthesia. The challenge procedure itself is not painful but resultant viral infection may have caused pain and/or distress. This work was conducted to evaluate the effectiveness of vaccination (proprietary).

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics, and sedatives could not be provided because it had the potential to mask or potentiate the effects of infection and confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians and animal technicians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which are found to be moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   Agency: FDA

CFR: As appropriate, study conducted under Title 21, Food and Drugs, specifically, 21CFR.314.610, approval based on evidence of effectiveness from studies in animals (under subpart I--approval of new drugs when human efficacy studies are not ethical or feasible), and 21CFR601.91, approval based on evidence of effectiveness from studies in animals (under subpart H--approval of biological products when human efficacy studies are not ethical or feasible).

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 3

3. Species (common name) of animals used in this study: Cynomolgus macaques

4. Explain the procedure producing pain and/or distress: Intravenous challenge with a systemic virus to test the virulence of a newly generated stock of virus. The challenge was performed under Telazol® anesthesia. The challenge procedure itself is not painful but resultant viral infection may have caused pain and/or distress.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Anesthetics, analgesics, and sedatives could not be provided because it had the potential to mask or potentiate the effects of infection and confound results. There are no known characterized, surrogate markers to predict mortality. Experienced staff veterinarians and animal technicians were on site to monitor the study conduct and any animal welfare issues. Pain-relieving drugs were not used, on the basis that the use of pain medications could mask the clinical appearance, affecting the experimental data. Animals exhibiting clinical signs or those which are found to be moribund were euthanized to alleviate pain and distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   This work was conducted to validate a model and develop data necessary for definitive studies [required by the federal government under 21CFR.314.610 - subpart I -approval of new drugs when human efficacy studies are not ethical or feasible, and/or 21CFR601.91 - subpart H -approval of biological products when human efficacy studies are not ethical or feasible].

Column E Explanation Form

1. Registration Number: 31-R-0021

2. Number of animals used in this study: 5

3. Species (common name) of animals used in this study: Canine

4. Explain the procedure producing pain and/or distress: Dosing with toxic substance to test efficacy of the antidote. The FDA requires preclinical testing to be done prior to licensure.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

   Animals were anesthetized for the dosing period but did not fully recover to normal status after anesthesia and dosing. They did not experience pain, but potentially experienced distress. It was necessary to allow the full spectrum of toxicity to manifest to see whether the antidote would alleviate

the signs. Animals exhibiting more than short term clinical signs were euthanized to alleviate distress. These data are critical to human safety in the event of human exposure.

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number:

   Agency: FDA

   CFR: As appropriate, study conducted under Title 21, Food and Drugs, specifically, 21CFR.314.610, approval based on evidence of effectiveness from studies in animals (under subpart I--approval of new drugs when human efficacy studies are not ethical or feasible), and 21CFR601.91, approval based on evidence of effectiveness from studies in animals (under subpart H--approval of biological products when human efficacy studies are not ethical or feasible)